

REMARKS

The Office Action dated Feb. 15, 2005, has been received and its contents have been carefully noted. The following remarks are submitted as a full and complete response to the outstanding action. By this response, Applicants have obviate the objection to the Abstract of the Disclosure exceeding 150 words in length and to the cross reference to related applications. Also claim 1 has been amended to place the application in a better form for consideration. No new matter has been introduced. Meanwhile, Applicants provide the following comments in order to clarify what is presently set forth by Applicants' claimed invention and to clearly distinguish the present invention from the prior art cited by the Examiner. As previously, Claims 1-5 and 7 remain pending in the instant application.

Section 102 (b) Rejections

Claims 1-2 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Bletscher (US Patent 5,070,495). This rejection is respectfully traversed in that the patent to Bletscher neither discloses nor remotely suggests what is presently set forth by Applicants' claimed invention.

As the Examiner can readily appreciate, independent claim 1 of the pending application is directed to an optical power calibration method for calibrating a writing power of, for example, a Read/Write Compact Disc (CD-R/W) driven optical storage carrier player. Particularly, the method comprises, providing data to be written; determining a writing location of the data in the data storage area; performing an optical power calibration process in the first power calibration area when the writing location being within a predetermined portion of the data storage area; and performing an optical power calibration process in the second power calibration area when the

writing location being out of the predetermined portion. Clearly, these limitations are nowhere to be found in the Bletscher reference.

Bletscher discloses that the recording power of the laser recording system is calibrated at a radially innermost one of the tracks to produce a minimal noise level upon readback. After adjusting the laser recording power, the recording pulse duration is calibrated for minimal noise in the same track and in a second one of the tracks (col 4, lines 17-23) and that the laser recording pulse duration is calibrated for minimal noise in a radially outermore one of the tracks. (col 4, lines 24-26). Referring to FIG. 4, at a radially-inwardmost track 110 of the large number of concentric tracks, the laser 67 power is adjusted for minimal asymmetry in a readback signal using test pattern 12. Following this adjustment, a plurality of duration adjustments are made at the radially displaced tracks 110, 111, 112, 113 and 114 (col. 8. lines 49-52).

Also in col. 7, lines 6-13 and FIG. 6 of Bletscher, it mentions, "In any event, the first machine operation at step 170 to be performed causes the carriage 33 to move to the radially-inwardmost track 110. Within the scope of the present invention, it is a notion to seek one of the innermore radial tracks, such as either track 110 or 111, for performing an initial laser beam intensity adjustment; it is preferred that the radially inwardmost track 110 be used. Once the desired track is reached, then at step 171 the laser power is calibrated."

Futhermore, Bletscher clearly states in col. 7, lines 29- 41, "The calibration is iterative; each successive iteration being conducted at increasing recording power (light intensity) levels until a threshold crosstalk level is reached at either one (preferably a radially-outward adjacent track is used for sensing crosstalk) of the immediately-radially adjacent tracks. In each iteration, after the power calibration track is first recorded, then in a second step, the transducer is moved

to scan the immediately-radially adjacent track(s) (either one or both of the radially adjacent tracks may be scanned for crosstalk measurements) which are always erased for detecting crosstalk signals derived from the recorded power calibration track.”

It is initially noted that one aspect of the present invention is that the optical power calibration method performs an optical power calibration process in either the inner power calibration area or the outer power calibration area according to the writing location of the data. Referring to Fig. 3, The CD-R/W drive 30 performs an optical power calibration process in either the inner power calibration area 40 or the outer power calibration area 52 according to a writing location of data. As shown in Fig.3, the preferred embodiment of the present invention divides the data storage area 46 into an inner area 46a and an outer area 46b. When writing data, the control device 36 determines a writing location for the data into the data storage area 46. When the writing location is located within the inner area 46a, the CD-R/W drive 30 performs the optical power calibration process in the inner power calibration area 40 shown in Fig.2. When the writing location is out of the inner area 46a, and located in the outer area 46b, the CD-R/W drive 30 performs the optical power calibration process in the outer power calibration area 52. Also referring to the steps shown in Fig. 4, since the inner area 46a is adjacent to the inner power calibration area 40, and the outer area 46b is adjacent to the outer power calibration area 52, the surrounding and vibrational characteristics of the inner area 46a and the outer area 46b are close to that of the inner power calibration area 40 and the outer power calibration area 52 respectively. Therefore, the optical power calibration method according to the present invention can precisely predict an optimum writing power in the data storage area 46 to enhance the writing quality.

As the Examiner quotes, in col. 5, lines 4-13 of Bletscher, it recites, “...The first step 11 repeatedly records a pulse pattern 12 on optical disk 30 along an entire length of a magneto optic

track. Pattern 12 is selected to be relatively low frequency (long half-wavelengths), such as using a binary data pattern 100010001, for eliminating inner-symbol interference.” However, binary data pattern 12, which is a test pattern used for independently and sequentially adjusting power level of a laser and the pulse duration of the pulses for enabling symmetry in the recorded signal pattern 12 on the optical disk (col. 5, lines 16-19), fails to teach the “data to be written on the data storage area” in Applicants’ invention.

Moreover, Bletscher fails to teach the step of determining a writing location of the data in the data storage area, which is divided into an inner area and an outer area in an embodiment of the present invention. It should be noted that Examiner’s quotation in the col. 8, lines 1-8 of Bletscher, “...The detected signals include not only data that is recorded but also all of the so-called ancillary signals as well...” is related to how to detect the recorded/written data but is not related to “determining a writing location of the data to be written on the data storage area.”

Therefore Bletscher, performing iteratively calibrations at different tracks, fails to teach the optical power calibration method in accordance with the present invention for performing an optical power calibration process in either the inner power calibration area or the outer power calibration area according to the writing location of the data. Accordingly, it is respectfully submitted that Applicants’ claimed invention as set forth in claim 1 as well as claims 2 and 4 which include all the limitations of claim 1 are clearly not anticipated by Bletscher and are in proper condition for allowance.

Section 103 (a) Rejections

Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bletscher in view of Suga (U.S. Patent 6,418,102). This rejection is respectfully traversed in that the

patent to Suga when combined with the teaching of Bletscher fails to disclose or remotely suggest what is presently set forth by Applicants' claimed invention.

Initially, it is noted that both Claims 3 and 5 are directly dependent upon independent Claim 1 and include all the limitation thereof. Furthermore, while the patent to Suga may disclose particularly to a method and apparatus for optical disk recording which is capable of efficiently performing an optimum laser power calibration on a recordable optical disk, this reference clearly fails to overcome the aforementioned shortcoming associated with the teachings of Bletscher.

Specifically, as noted hereinabove, Bletscher fails to teach all the limitation of independent Claim 1, while Suga discloses the carrier player controls rotation of the optical storage carrier in a constant linear velocity (CLV) manner, the combination proposed by the Examiner still fails to disclose or suggest what is presently set forth by Applicants' claimed invention. Particularly, the combination proposed by the Examiner fails to teach the step of determining a writing location of the data in the data storage area, as recited by Applicants' claimed invention. Accordingly, it is respectfully submitted that Applicants' claimed invention as set forth in dependent claims 3 and 5 are likewise believed to be in proper condition for allowance.

Section 102 (e) Rejections

Claims 1-5 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Seong et al. (U.S. Patent 6,728,177). It should be noted that Seong was filed on Sep. 06, 2001. However, the present invention claims priority of Taiwan Patent Application No. 90103480 filed on Feb 15, 2001, which antedates Seong's filing date so that this rejection is respectfully traversed.


Applicants herewith provide an English translation of the entire Taiwanese Application as the reference to perfect Applicants' priority claim.

CONCLUSION

In light of the above remarks, Applicants respectfully submit that all pending Claims 1-5 and 7 are in condition for allowance, and respectfully request the withdrawal of the rejections. Accordingly, a Notice of Allowance is respectfully requested.

Respectfully submitted,

Date: 5/12/05

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